

REMARKS**III. New Claims: Content**

Please add new claims 35-42.

In the office action of March 6, 2003, the Examiner cited a new reference, Luoh et al. In a telephone conversation with Examiner Le and Supervisor Fahmy on April 3, 2003, clarifications to the claims were identified that would assist the Examiner in resolving his concerns. These new claims incorporate those clarifications.

New claim 35 recites a method for making a transistor containing a gate dielectric structure, comprising providing a gate conductor; providing a channel; and providing, between the gate conductor and the channel and in contact with the channel, an oxide layer of the gate dielectric structure by an in-situ steam generation process. Support for this claim can be found in Figures 1, 2a, and 2b and in paragraph [25] through [32].

New claim 36 recites a method for making a SONOS device, comprising providing a channel region; providing a first oxide layer in contact with the channel region by an in-situ steam generation process; providing a nitride layer in contact with the first oxide layer; and providing a second oxide layer in contact with the nitride layer. Support for this claim can also be found in Figure 1 and paragraphs [25] through [32].

New claim 37 recites a SONOS semiconductor device made by a method comprising providing a channel region; providing a first oxide layer in contact with the channel region by an in-situ steam generation process; providing a nitride layer in contact with the first oxide layer; and providing a second oxide layer in contact with the nitride layer. Support for this claim is found in Figure 1 and paragraphs [25] through [32].

New claim 38 recites an integrated circuit containing a SONOS semiconductor device made by a method comprising providing a silicon wafer or silicon layer; providing a first oxide layer in contact with the silicon wafer or silicon layer by an in-situ steam generation process; providing a nitride layer in contact with the first oxide layer; and providing a second oxide layer in contact with the nitride layer. Support for this claim is found in Figure 1 and paragraph [20] and in paragraphs [25] through [32].

New claim 39 recites a method for making a gate dielectric structure for a SONOS device, comprising providing a channel; providing an oxide layer of a gate dielectric structure in contact with the channel by in-situ steam generation, the oxide layer having a thickness of about 10 to about 200 angstroms; and annealing the oxide layer in a nitric oxide atmosphere. Support for this claim is again found in Figure 1 and paragraphs [25] through [32].

New claim 40 recites a method for making a gate dielectric structure for a thin film transistor or a SONOS device, comprising providing a gate conductor; providing a channel region; and providing, between the gate conductor and the channel region and in contact with the channel region, an oxide layer of a gate dielectric structure by an in-situ steam generation process performed at a temperature ranging from about 600 to about 1050 degrees Celsius, a pressure ranging from about 100 millitorr to about 760 torr, and for a time sufficient to deposit an oxide thickness of about 10 to about 200 angstroms. Support for this claim is found in Figures 1, 2a, and 2b and in paragraphs [25] through [32] and in paragraphs [36] through [37].

New claim 41 recites a thin film transistor containing a gate dielectric structure made by a method comprising providing a gate conductor; providing a channel region; and providing, between the gate conductor and the channel region and in contact with the channel region, an

oxide layer of the gate dielectric structure on the channel region by an in-situ steam generation process. Support is found in Figures 2a and 2b and in paragraphs [33] through [37].

New claim 42 recites an integrated circuit containing a thin film transistor with a gate dielectric structure made by a method comprising providing a gate conductor; providing a channel; and providing, between the gate conductor and the channel and in contact with the channel, an oxide layer of the gate dielectric structure by an in-situ steam generation process. Support is found in Figures 2a and 2b and in paragraphs [33] through [37].

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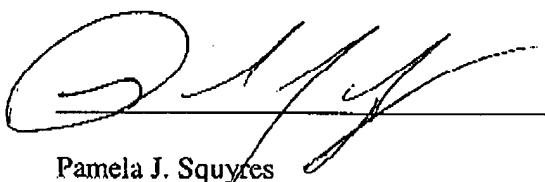
IV. Conclusion

Applicants appreciate Examiner Le's and Supervisor Fahmy's willingness to discuss the claims in a telephone conversation of April 3, 2003 and their assistance in identifying and resolving issues of concern.

In view of these amendments and remarks, Applicants submit that this application is in condition for allowance. Reconsideration is respectfully requested. If any objections or rejections remain, Applicants respectfully request an interview to discuss the references. If the Examiner has any questions, he is asked to contact the undersigned agent at (408) 869-2921.

April 30, 2003

Date



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